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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,005	12/28/2001	Juanita Parris	C-531	1866

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,005

Applicant(s)

PARRIS ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8,9,11-13,15 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 3-5,7,10,14,16-18 and 25-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/1/02
+ 6/9/03
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 12-13, 19, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Scheibelhoffer et al. (U.S. 5,670,561).

Scheibelhoffer et al. disclose method of making dry color concentrate, i.e. solventless universal base composition, comprising dispersing a pigment in a resin wherein the resin is obtained from both hydrophobic, i.e. styrene, monomer and hydrophilic, i.e. maleic anhydride, monomer in ratio of hydrophobic monomer to hydrophilic monomer of, for instance, 3/1 or 1/1. The resin has molecular weight of 500-3000 while the pigment is present in the color concentrate in amount of 25-95%. The pigment is dispersed in the resin in the presence of additives such as surfactant (col.1, lines 9-10, col.1, line 64-col.2, line 6, col.2, lines 40-42, col.4, lines 42-67, col.5, lines 54-65, and col.7, lines 38-44 and 65-66). Given that the resin contains both hydrophobic monomer and hydrophilic monomer that are present in ratio as presently claimed, it is clear that the resin will inherently be soluble in both water and organic solvent as presently claimed.

In light of the above, it is clear that Scheibelhoffer et al. anticipate the present claims.

3. Claims 1-2, 9, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. (U.S. 4,234,466).

Takahashi et al. disclose method of making solid pigment dispersion, i.e. solventless universal base composition, comprising dispersing a pigment in polyester wherein the polyester is obtained from both hydrophobic monomer and hydrophilic monomer. The pigment is present in the color concentrate in amount of 1-70%. The pigment is dispersed in the resin in the presence of additives (col.2, lines 25-32, col.3, lines 25-26 and 56-58, col.4, lines 9-13, and col.5, lines 26-31). Given that the polyester contains both hydrophobic monomer and hydrophilic monomer that are present in ratio as presently claimed, it is clear that the polyester will inherently be soluble in both water and organic solvent as presently claimed.

From example 2, it is calculated that the ratio of hydrophobic monomer to hydrophilic monomer present in the polyester is approximately 0.22 (19.7/88).

In light of the above, it is clear that Takahashi et al. anticipate the present claims.

4. Claims 1-2, 6, 8-9, 11-12, 15, 19-20, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 116666 taken in view of the evidence of Thomm et al. (U.S. 3,846,507) and Login (U.S. 4,098,741).

EP 116666 discloses method of making color concentrate, i.e. solventless universal base composition, comprising dispersing a pigment in a resin wherein the resin is obtained from both hydrophobic monomer and hydrophilic monomer and is soluble in both water and organic solvent. The pigment is present in the color concentrate in amount of 1-70% and is in the form of a presscake. The resin has softening temperature of 130-350 °C (col.1, lines 3-5 and 27-34, col.2,

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lines 7-10, col.5, lines 7-17, 22, 24-27, and 31-33, col.6, lines 4-9, col.7, lines 9-31, and col.11, lines 20-35).

EP 116666 discloses that the resins include acrylic resin comprising hydrophobic monomer and hydrophilic monomer in ratio of, for instance, 4/1 (example 15) as well as polyamide and polyester. When discussing the use of specific types of polyamide and polyester in the examples, EP 116666 refers to Thomm et al. and Login, respectively. Example 2 of Thomm et al. disclose polyamide made from hydrophobic and hydrophilic monomer present in ratio of approximately 0.91 $(232+116)/(226+268)$. Login discloses the use of polyester which has acid number of 5-15 and molecular weight of 4000-11000 (col.5, lines 15-19) which is obtained from hydrophobic monomer and hydrophilic monomer in ratio of, for instance 1.14/1 $(598/(467+56.8))$ (see Example 1).

In light of the above, it is clear that EP 116666 anticipates the present claims.

Allowable Subject Matter

5. Claims 3-5, 7, 10, 14, 16-18, and 25-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The above claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims for the following reasons.

Scheibelhoffer et al. (U.S. 5,670,561) disclose method of making color concentrate comprising dispersing a pigment in acrylic resin, Takahashi et al. (U.S. 4,234,466) disclose method of making solid pigment dispersion comprising dispersing a pigment into polyester, and

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EP 116666 each disclose method of making color concentrate comprising dispersing a pigment in acrylic resin, polyamide or polyester. However, there is no disclosure in any of the references of dispersing a pigment in polyurethane which is obtained from hydrophobic monomer and hydrophilic monomer as required in present claims 3-5 or in copolymer which is urethane-amide or urethane-ester which is obtained from hydrophobic monomer and hydrophilic monomer as required in present claim 14. Further, while Takahashi et al. and EP 116666 disclose the use of polyamide and/or polyester, there is no disclosure in either reference that the total weight of the hydrophobic monomer and hydrophilic monomer in the polyamide is 40-60% and in the polyester is 50-70% as required in present claims 7 and 10, respectively.

Additionally, all the references are silent with respect to the amine number of the resin while Scheibelhoffer et al. and Takahashi et al. are silent with respect to the acid number of the resin. While EP 116666 discloses that the acid number of the polyester is 5-15, this falls outside the scope of present claim 16, which requires acid number of 30-500.

Further, Scheibelhoffer et al. disclose that the color concentrate is used to color plastic, Takahashi et al. disclose that the solid pigment dispersion is used to color plastic or powdery paint, and EP 116666 discloses that the color concentrate is used to color synthetic textile fibers. Thus, there is no disclosure or suggestion in any of the references of method comprising dissolving the color concentrate or solid pigment dispersion into water or organic solution or any disclosure or suggestion of ink as required in present claims 25-30.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Needham (U.S. 3,846,360) disclose base for universal pigment concentrate comprising polymer and pigment, however, there is no disclosure that the polymer is obtained from hydrophobic monomer and hydrophilic monomer in ratio as presently claimed.

Guzi, Jr. et al. (U.S. 4,127,422) disclose dry pigment composition comprising pigment and polymer wherein the polymer is obtained from hydrophobic monomer and hydrophilic monomer, however, there is no disclosure or suggestion of ratio of hydrophobic monomer and hydrophilic monomer as required in all the present claims.

Peabody (U.S. 4,168,180) disclose pigment concentrate comprising polymer and pigment, however, there is no disclosure that the polymer is obtained from hydrophobic monomer and hydrophilic monomer in ratio as presently claimed.

Sidi (U.S. 4,293,475) disclose universal pigment dispersion comprising pigment and polymer wherein the polymer is obtained from hydrophobic monomer and hydrophilic monomer, however, the universal pigment dispersion is not solventless as required in all the present claims.

EP 567229 disclose tinting composition for paints comprising pigment and polymer wherein the polymer is obtained from hydrophobic monomer and hydrophilic monomer, however, the universal pigment dispersion is not solventless as required in all the present claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

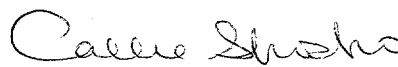
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/19/03